Commonwealth of Massachusetts Center for Health Information & Analysis (CHIA) Non-Government MA APCD Request for Data

This form is to be used by all applicants, except Government Agencies as defined in 957 CMR 5.02.

<u>NOTE</u>: In order for your application to be processed, you must submit the required application fee. Please consult the fee schedules for MA APCD data for the appropriate fee amount. A remittance form with instructions for submitting the application fee is available on the CHIA <u>website</u>.

I. GENERAL INFORMATION

APPLICANT INFORMATION	
Applicant Name:	Robert H. Aseltine, Jr., PhD
Title:	Professor and Interim Chair, Division of Behavioral
	Sciences and Community Health
	Deputy Director, Center for Public Health and Health
	Policy
Organization:	UCONN Health
Project Title:	A Study of High Deductible Health Plans in
	Massachusetts
Mailing Address:	UCONN Health Center, 263 Farmington Ave,
	Farmington CT
Telephone Number:	860 866-6904
Email Address:	Aseltine@uchc.edu
Names of Co-Investigators:	Kun Chen, PhD
Email Addresses of Co-Investigators:	Kun.chen@uconn.edu
Original Data Request Submission Date:	Aug 8, 2015
Dates Data Request Revised:	Nov 16, 2015
Project Objectives (240 character limit)	To describe the range and average of deductibles for
	consumers using high deductible health plans
ė v	(HDHPs) in Massachusetts from 2010 – 2014, and to
	examine the characteristics of patients with HDHPs
	and the physicians providing their care.
Project Research Questions (if applicable) or Business Use Case(s):	
	associated with HDHPs from 2010-2014?
	 percentage of total claims from 2010-
	2014 for services provided to patients
	insured by HDHPs
	average deductible for patients enrolled
	in HDHPs during the 2010-2014 period
	average deductible collected by
	physicians from patients in HDHPs during
	the 2010-2014 period
ja	2. What are the characteristics of patients enrolled
	in high deductible health plans, and how are they
	related to the amount of money that physicians

are collecting from patients with such plans?

3. What are the characteristics of physicians with patients enrolled in high deductible health plans, and how are they related to the amount of money collected from patients with such plans?

II. PROJECT SUMMARY

Briefly describe the purpose of your project and how you will use the requested CHIA data to accomplish your purpose.

Overview

According to recent analysis by America's Health Insurance Plans (AHIP), the number of patients enrolled in high-deductible health plans (HDHPs) has grown from 10 million in 2010 to over 15 million in 2014. In Massachusetts, total enrollment in HDHPs went from about 93,000 to 150,840 over the same period, and now represents 2.8 percent of the total commercial marketplace. A recent report by the Center for Health Information and Analysis shows that 45 percent of employers in Massachusetts now offer HDHPs, which is double the national average. The increase in HDHPs has been driven by employers seeking lower-cost health insurance products and other initiatives aimed at controlling health care costs. These plans typically require annual deductibles of \$1,200 for individuals and \$2,400 for families, usually without limiting the choice of provider.

While numerous articles have documented the hardship that HDHPs can cause for consumers, ^{2,3} there is scant research regarding the implications of such plans for physicians. There is virtually no data specifying the amount of money physicians are now collecting from patients covered by HDHPs, the characteristics of those patients (e.g., patient demographics and sickness), and the specialties and types of physicians impacted most by HDHPs.

Objectives

The proposed project has two main objectives:

- 1. To describe the range and average of deductibles for consumers using HDHPs in Massachusetts from 2010 2014
- 2. To examine the characteristics of (a) patients with HDHPs (e.g., patient age, location in the state, sickness and comorbidities, services utilized; and (b) the physicians with the providing care for patients with HDHPs (e.g., specialty, practice size, geographic location).

Research Questions

Using 2010-2014 data from the Massachusetts All-Payer Claims Database we will examine the following research questions related to our overall objectives:

- What percentage of total claims from 2010-2014 was for services provided to consumers insured by HDHPs?
 - What is the average deductible for patients enrolled in HDHPs over this period?
 - What is the average deductible collected by physicians from patients in HDHPs over this period?
- What are the characteristics of patients enrolled in high deductible health plans, and how are they related to the amount of money that physicians are collecting from patients with such plans?
 - Are physicians responsible for collecting large deductibles from sicker patients and patients from poorer areas?

- What are the characteristics of physicians with patients enrolled in high deductible health plans, and how are they related to the amount of money collected from patients with such plans?
 - How are such plans distributed among specialties and among those in larger vs. smaller practices?

Approach

Descriptive statistics will be calculated (e.g., means, medians, standard deviations) to demonstrate basic patterns and associations over time and across different physician and patient groups. Advanced statistical modeling will be employed to estimate the multivariate associations between different physician and patient characteristics and both participation in HDHPs and the financial costs associated with such plans. We will adjust for the clustering of patients within physicians and/or practices using generalized estimating equations (GEEs).

III. FILES REQUESTED

Please indicate which MA APCD file(s) you are requesting, the year(s) of data requested, and your justification for requesting *each* file. Please refer to the MA APCD Release 4.0 Documentation Guides for details of the file contents.

MA ALL PAYER CLAIMS DATABASE FILES	Year(s) Of Data Requested Current Yrs. Available	
	X 2010 X 2011 X 2012 X 2013 X 2014	
Medical Claims	Please provide justification for requesting Medical Claims file: Medical claims will be used to identify 1) the characteristics of patients (demographic and medical conditions and comorbidities) in HDHPs relative to traditional plans, 2) the costs associated with their care, 3) the characteristics (e.g., specialty, location) of providers caring for them.	
Pharmacy Claims	Please provide justification for requesting Pharmacy Claims file: Pharmacy claims will be used to identify the pharmaceutical utilization and costs among patients covered by HDHPs relative to traditional plans.	
☐ Dental Claims	Please provide justification for requesting Dental Claims file:	

¹ http://www.mass.gov/chia/docs/r/pubs/14/2014-employer-survey-summary-results.pdf

² http://www.healthcaredive.com/news/are-backers-of-high-deductible-plans-ignoring-the-facts/326006/

³ http://www.nytimes.com/2014/10/18/us/unable-to-meet-the-deductible-or-the-doctor.html

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Member Eligibility	Please provide justification for requesting Me	mber Eligibility file: Member eligibility
	file will be used identify member deductibles a	PROPERTY OF THE PROPERTY OF TH
	type and medical and pharmacy deductible info	ormation.
	Di	and an eller
☐ Provider (encrypted NPI)	Please provide justification for requesting Pro-	vider file:
Standard or		
☐ Provider* (unencrypted NPI)		
		s
	*Please provide justificaiton for requesting un	encrpted NPI (if requested). Refer to
	specifics in your methodology:	
	specifics in your methodology:	
	,	
Product	Please provide justification for requsting Prod	uct file: Product file will be used to
	obtain annual per person and per family deduc	tible amounts.
L		
IV. GEOGRAPHIC DETAIL		
	ng geographic options for MA residents:	
rease enouse <u>ene</u> or the ronown	8 8008 aprile options for the residentes	
☐ 3 Digit Zip Code (MA)	💢 5 Digit Zip Code (MA)
***Please provide justification for	or requesting 5 digit zip code. Refer to specific	
will be linked with area level inco	me estimates from US Census to provide a prox	y measure of patient socioeconomic
status.		
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
V. DATE DETAIL		
Please choose <u>one</u> option from the following options for dates:		
<u> </u>	, constant of the constant of	
☐ Year (YYYY) (Standard)	Month (YYYYMM) ***	☐ Day (YYYYMMDD) ***
, , , , , , , , , , , , , , , , , , , ,	/	[for selected data elements only]
*** If requested, lease provide j	*** If requested, lease provide justification for requesting Month or Day. Refer to specifics in your methodology:	
Month and year of date of service and plan start/end will be used to calculate the portion of physician billings attributed to HDHPs		
on a monthly basis from 2010-2014, as specificed in the Analysis Plan.		

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VI. FEE INFORMATION Please consult the fee schedules for MA APCD data, available at http://chiamass.gov/regulations/#957_5 , and select
from the following options:
APCD Applicants Only Academic Researcher Others (Single Use)
Others (Multiple Use)
Are you requesting a fee waiver? Ves No
If yes, please refer to the <u>Application Fee Remittance Form</u> and submit a letter stating the basis for your request (if required). Please refer to the <u>fee schedule</u> for qualifications for receiving a fee waiver. If you are requesting a waiver based on the financial hardship provision, please provide documentation of your financial situation. Please note that non-profit status alone isn't sufficient to qualify for a fee waiver.
VII. MEDICAID DATA [APCD Only] Please indicate here whether you are seeking Medicaid Data: Yes No
Federal law (42 USC 1396a(a)7) restricts the use of individually identifiable data of Medicaid recipients to uses that are directly connected with the administration of the Medicaid program. If you are requesting Medicaid data from Level 2 or above, please describe in detail why your use of the data meets this requirement. Applications requesting Medicaid data will be forwarded to MassHealth for a determination as to whether the proposed use of the data is directly connected to the administration of the Medicaid program. MassHealth may impose additional requirements on applicants for Medicaid data as necessary to ensure compliance with federal laws and regulations regarding Medicaid.

VIII. PURPOSE AND INTENDED USE

1. Please explain why completing your project is in the public interest.

When patients are unable to pay the deductibles owed under their plans, physicians may remain uncompensated for the care they provided. The growing burden on physicians to collect large sums of money from their patients represents a form of cost-shifting to physicians that may be unsustainable if enrollment in HDHPs continues to grow.

2.	Attach a brief (1-2 pages) description of your research methodology. (This description will not be posted on the internet.)
3.	Has your project received approval from your organization's Institutional Review Board (IRB)? Please note that CHIA will not review your application until IRB documentation has been received (if applicable). — Yes, and a copy of the approval letter is attached to this application.
	□ No, the IRB will review the project on No, this project is not subject to IRB review. NOTE: This project has been deemed non-human subjects research and has received a HIPAA waiver for obtaining consent due to the de-identified nature of the data.

☐ No, my organization does not have an IRB.

IX. APPLICANT QUALIFICATIONS

1. Describe your qualifications to perform the research described or accomplish the intended use of CHIA data.

The human subjects determination form from the UConn Health Center IRB is attached.

Robert Aseltine, PhD, is Professor and Interim Chair of the Division of Behavioral Sciences and Community Health and Deputy Director of the Center for Public Health and Health Policy at UCONN Health. Dr. Aseltine has extensive background in analyzing claims data to address substantive research and policy questions. As co-lead of the evaluation for Connecticut's State Innovation Model Test Grant, Dr. Aseltine used claims from the CT Hospital Inpatient Discharge Database (HIDD) to establish baselines and targets for reducing hospitalizations for ambulatory sensitive conditions within the state. He has also performed extensive analysis with the HIDD to examine race and ethnic disparities in hospital readmissions for a variety of common diagnoses and procedures, including childbirth, total joint arthroplasty, heart failure and chest pain. He also recently completed an analysis of CT Medicaid claims data to investigate whether electronic referrals can improve access to care and reduce costs associated with specialty referrals for Medicaid patients. Dr. Aseltine is a member of the CT All-Payer Claims Database Advisory Board. Kun Chen, PhD, has worked extensively with Dr. Aseltine in the analysis of medical claims for the past 2 years. He is Assistant Professor in the Department of Statistics at the University of Connecticut. Dr. Chen has extensive experience in employing the advanced statistical techniques described in the proposal.

2. Attach résumés or curricula vitae of the applicant/principal investigator, key contributors, and of all individuals who will have access to the data. (These attachments will not be posted on the internet.)

X. DATA LINKAGE AND FURTHER DATA ABSTRACTION

Note: Data linkage involves combining CHIA data with other databases to create one extensive database for analysis. Data linkage is typically used to link multiple events or characteristics that refer to a single person in CHIA data within one database.

1.	Do you intend	to link or merge CHIA Data to other datasets?
	×	Yes
	ĺ –	No linkage or merger with any other database will occur

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2.	 If yes, will the CHIA Data be linked or merged to other individual patient level data (e.g. disease registries, dea data), individual provider level data (e.g., American Medical Association Physician Masterfile), facility level (e 	
	American Hospital Association data) or with aggregate data (e.g., Census data)? [check all that apply]	
	☐ Individual Patient Level Data	
	What is the purpose of the linkage:	
<u> </u>		
	What databases are involved, who owns the data and which specific data elements will be used for linkage:	
	☐ Individual Provider Level Data	
	What is the purpose of the linkage:	
	What databases are involved, who owns the data and which specific data elements will be used for	
	linkage:	
	☐ Individual Facility Level Data	
	What is the purpose of the linkage:	
	What databases are involved, who owns the data and which specific data elements will be used for	
	linkage:	



Aggregate Data

What is the purpose of the linkage:

APCD data will be linked with US Census zip code level data on income to provide a proxy measure of income, which will be used as a control variable in the analysis.

What databases are involved, who owns the data and which specific data elements will be used for linkage:

Income data will be obtained from the US Census American Community Survey (ACS), which are publicly available at factfinder2.census.gov. Data elements used for linkage will be restricted to patient zip code.

3. If yes, for each proposed linkage above, please describe your method or selected algorithm (e.g., deterministic or probabilistic) for linking each dataset. If you intend to develop a unique algorithm, please describe how it will link each dataset.

Deterministic linkage will be used.

4. If yes, please identify the specific steps you will take to prevent the identification of individual patients in the linked dataset.

Only aggregate, zip code level data from an external source will be included in integration which will pose no risks to patient privacy.

5. If yes, and the data mentioned above is not in the public domain, please attach a letter of agreement or other appropriate documentation on restrictions of use from the data owner corroborating that they agree to have you initiate linkage of their data with CHIA data and include the data owner's website.

XI. PUBLICATION / DISSEMINATION / RE-RELEASE

1. Describe your plans to publish or otherwise disclose CHIA Data, or any data derived or extracted from such data, in any paper, report, website, statistical tabulation, seminar, conference, or other setting.

The results of this study will be presented in policy briefs, peer-reviewed journal article(s) and in one or more

Meetings of the American Public Health Association and the American Statistical Association.		
Only aggregate data and results of statistical analysis will be presented. Results will not be presented in a way that would allow the identification of individual physicians, physician groups, or their patients.		
2. Will the results of your analysis be publicly available to any interested party? Please describe how an interested party will obtain your analysis and, if applicable, the amount of the fee.		
Journal articles, policy briefs, and presentations will be available upon request. No fees will be charged.		
3. Will you use the data for consulting purposes? ☑ Yes □ No		
 4. Will you be selling standard report products using the data? ☐ Yes ☒ No 		
5. Will you be selling a software product using the data?☐ Yes☒ No		
6. Will you be reselling the data? □ Yes ☑ No		
If yes, in what format will you be reselling the data (e.g., as a standalone product, incorporated with a software product, with a subscription, etc.)?		
7. If you have answered "yes" to questions 3, 4 or 5, please describe the types of products, services or studies.		
Findings from the proposed study will be used to provide advice and consultation to the Massachusetts Medical Society related to the impact of high deductible health plans on physicians.		

presentations at professional conferences. We anticipating submitting the results for presentation at the Annual

XII. USE OF AGENTS AND/OR CONTRACTORS

Third-Party Vendors. Provide the following information for all agents and contractors who will work with the CHIA Data.

Company Name:	
Contact Person:	
Title:	
Address:	
Telephone Number:	
E-mail Address:	
Organization Website:	
and/or your database? □ Yes □ No	or have access to the data at a location other than your location, your off-site server
procedures in your Data	ormation about the agent/contractor's data management practices, policies and Management Plan.
9. Describe the tasks and p	roducts assigned to this agent or contractor for this project.
10. Describe the qualificatio	ns of this agent or contractor to perform such tasks or deliver such products.
11. Describe your oversight	and monitoring of the activity and actions of this agent or subcontractor.

XIII. ASSURANCES

Applicants requesting and receiving data from CHIA pursuant to 957 CMR 5.00 ("Data Recipients") will be provided with data following the execution of a data use agreement that requires the Data Recipient to adhere to processes and procedures aimed at preventing unauthorized access, disclosure or use of data, as detailed in the DUA and the applicant's CHIA-approved Data Management Plan.

Data Recipients are further subject to the requirements and restrictions contained in applicable state and federal laws protecting privacy and data security, and will be required to adopt and implement policies and procedures designed to protect CHIA data in a manner consistent with the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

By my signature below, I attest to: (1) the accuracy of the information provided herein; (2) my organization's ability to meet CHIA's minimum data security requirements; and (3) my authority to bind the organization seeking CHIA data for the purposes described herein.

A = A		
Signature:	from After	
Printed Name:	Robert Aseltine	
Title	Professor	
Original Data Request Submission Date:	Aug 8, 2015	
Dates Data Request Revised:	Nov 16, 2015, January 19, 2016	